

MATH

**unruly
Splats**



Grade Level: 3rd Grade

Skill: Rounding

Time: 40 minutes

Game Setup: 3 Splats

Unruliness: Jumping

Rounding to the Nearest 10 or 100

Students will practice rounding numbers to the nearest 10 or 100

Objective

- Students will round numbers to the nearest 10.
- Students will round numbers to the nearest 100.

Standard

- 3.NBT.A.1 Use place value understanding to round whole numbers to the nearest 10 or 100.

Materials

- 3 Splats per group
- 1 device per group
- Number line for display

Resources

[Number Line for Display](#) 

Preparation

- Prepare and connect 3 Splats per device, per group.
- Ensure you have a device large enough to display numbers for students to see. If you are playing with the whole group, a projector is necessary.

Warm Up

Begin the day by playing the Multiples of 10 game from yesterday. You may want to take a few minutes to remind students how to play. Allow students to practice independently on their devices for 7-10 minutes, or play as a group.

Review

A number line model is a visual representation of numbers placed in order from least to greatest. It helps us see where a number falls between two others. Here's how we can use a number line model to round to the nearest 10 or 100:

Let's take the number 47 as an example. Display the number line below. Find the midpoint (45) color the box red, or put a red dot under 45. Tell students that the midpoint of a number or any number greater than the midpoint will round up. Now, locate 47 on the number line. Notice that it's greater than 45 and it is closer to 50 than to 40.

To round 47 to the nearest 10, we look at the nearest tens value, which is 50.

Since 47 is closer to 50, we round it up to 50.

40	41	42	43	44	45	46	47	48	49	50
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Practice using this method to round the equations below:

- 63 to the nearest 10
- 816 to the nearest 10
- 13 to the nearest 10

Continue practicing until students are confident rounding to the nearest 10.

Now let's try rounding 345 to the nearest 100 using the number line model.

Display the number line below. Show students that the number line is counting by 10 because it would take way too much time to draw 100 lines. Find the midpoint (350) and mark it with a red dot. Tell students that the midpoint of a number or any number greater than the midpoint will round up. Any number less than the midpoint will round down. Because we are rounding to the nearest 100 now, we are rounding to either 300 or 400. Because 345 is less than 350, we round down to 300. Tell students to notice that the only number we kept is the 3, the 45 turns to zeros because we are only keeping the number in the hundreds place.

300	310	320	330	340	350	360	370	380	390	400
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Practice using this method to round the equations below:

- 241 to the nearest 100
- 539 to the nearest 100
- 23 to the nearest 100

Continue practicing until students are confident rounding to the nearest 100.

Now display Rounding to the Nearest 10 game and model how to play the game for students. Rounding to the Nearest 100 game has the same rules but students should round to the nearest 100 instead of 10.

How to Play Rounding to the Nearest 10

- 1:** Connect and arrange your Splats according to the instructions.
- 2:** To start the game, press **RUN**.
- 3:** A random number between 1 to 100 will appear on Splat 1.
- 4:** Round Splat 1's number to the nearest 10.
- 5:** Identify whether to round up or down or stay the same.
- 6:** Stomp on Splat 2 if the number should round down
- 7:** Stomp on Splat 3 if the number should round up
- 8:** Stomp on Splat 1 to keep the number the same.
- 9:** If the answer is correct, you will hear the **Ding** sound. Points are awarded for correct answers.
- 10:** If the answer is incorrect, you will hear the **Buzz** sound.
- 11:** Splat 4 is only needed in the virtual playground to keep score!
- 12:** Be aware, the timer is on! See how many correct answers you can get before the timer runs out.
- 13:** Students can play as a group and rotate after each number, or each student can play for the whole 60 seconds and see who can score the most points!

How to Play Rounding to the Nearest 100

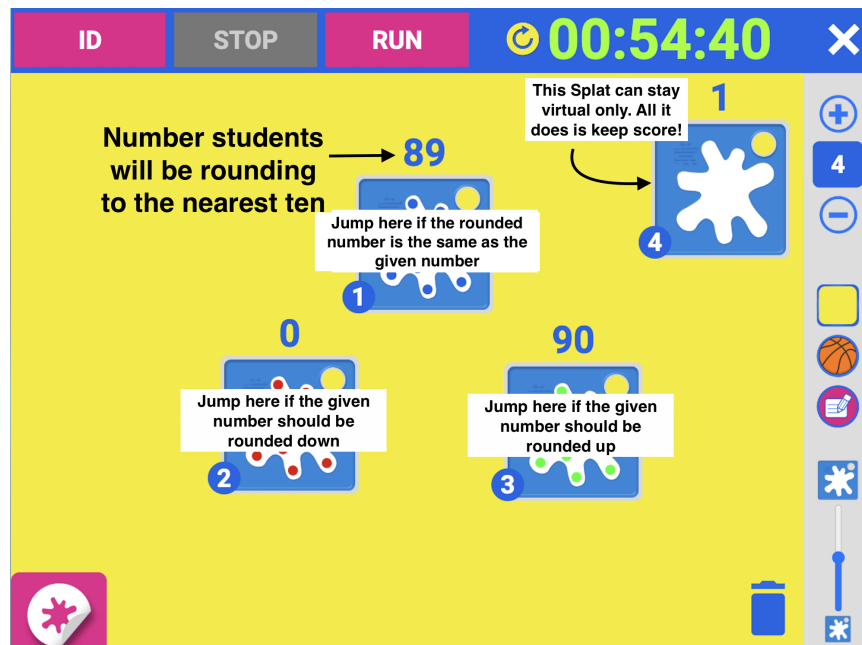
- 1:** Connect and arrange your Splats according to the instructions.

- 2:** To start the game, press **RUN**.
- 3:** A random number between 1 to 1000 will appear on Splat 1.
- 4:** Round Splat 1's number to the nearest 100.
- 5:** Identify whether to round up or down or stay the same.
- 6:** Stomp on Splat 2 if the number should round down
- 7:** Stomp on Splat 3 if the number should round up
- 8:** Stomp on Splat 1 to keep the number the same.
- 9:** If the answer is correct, you will hear the **Ding** sound and the device will say the correct number to round to. Points are awarded for correct answers.
- 10:** If the answer is incorrect, you will hear the **Buzz** sound.
- 11:** Splat 4 is only needed in the virtual playground to keep score!
- 12:** Be aware, the timer is on! See how many correct answers you can get before the timer runs out.
- 13:** Students can play as a group and rotate after each number, or each student can play for the whole 60 seconds and see who can score the most points!

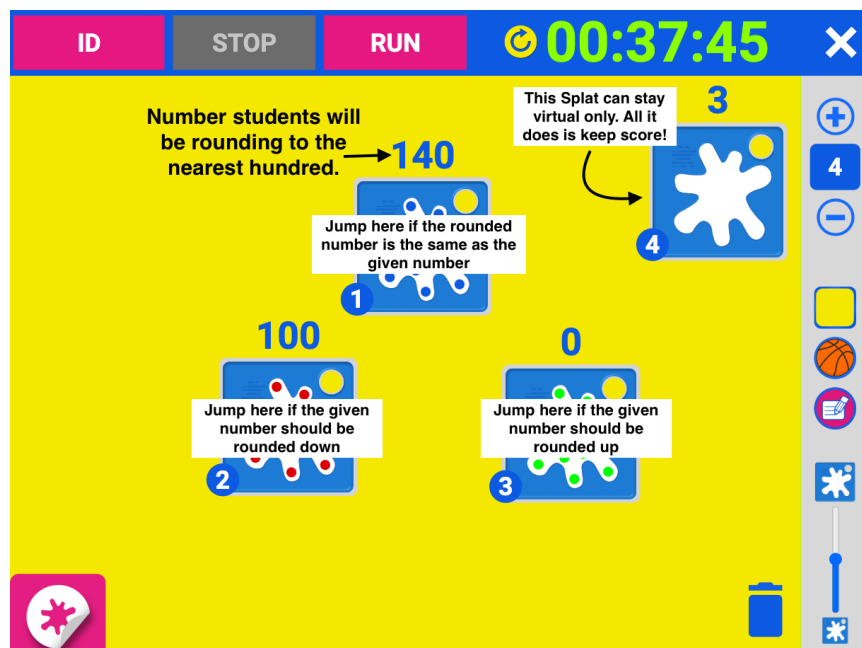
Notes and Variations

- Increase or decrease the range by following the screenshot instructions below.
- Increase or decrease the countdown timer.

Splat Arrangement Round to the Nearest 10



Splat Arrangement Round to the Nearest 100



Modifying The Code

